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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,006	11/21/2001	Richard Gillett	EMC-04-052	3449
24227	7590	11/16/2007	EXAMINER	
EMC CORPORATION OFFICE OF THE GENERAL COUNSEL 176 SOUTH STREET HOPKINTON, MA 01748			COULTER, KENNETH R	
			ART UNIT	PAPER NUMBER
			2141	
			MAIL DATE	DELIVERY MODE
			11/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/991,006

Applicant(s)

GILLET ET AL.

Examiner

Kenneth R. Coulter

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2007 (RCE filed).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-21, 25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-21, 25 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 25 is objected to under 37 CFR 1.75 as being a substantial duplicate of claims 1 and 20. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim 26 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 21. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 13, 15 – 21, 25, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Lumelsky et al. (U.S. Pat. No. 6,460,082) (Management of Service-Oriented Resources Across heterogeneous Media Servers Using Homogeneous Service Units and Service Signatures to Configure the Media Servers).

2.1 Regarding claim 1, Lumelsky discloses a system for delivering content over a data network, comprising:

a data storage device for storing content to be delivered over the data network (Figs. 1, 2, 4, 5, 6);

a server process capable of monitoring the data network for responding to a request to serve selected content over the data network (Fig. 5; col. 11, lines 39 – 46); and

a file system capable of communicating with the server process and capable of processing the request to process *meta-data that identifies attributes of the request* and being representative of a level of service to be provided to the request (Fig. 2, item 152; col. 5, lines 39 – 55; col. 7, lines 28 - 51);

a scheduling process for generating a schedule for servicing the request (col. 14, lines 1 – 21 “the **service unit management module (SUMM)** determines whether the **provisioning request can be scheduled by the meta-resource** given the available resources.”; col. 13, lines 59 – 67).

2.2 Per claim 2, Lumelsky teaches a service level manager capable of determining, as a function of the meta-data, whether the selected content may be serviced in compliance with the associated level of service (Abstract; Fig. 2; col. 5, lines 39 – 55; col. 7, lines 28 - 51).

2.3 Regarding claim 3, Lumelsky discloses that the server process includes a process for directing the request to the service level manager (Fig. 5; col. 11, lines 39 – 46).

2.4 Per claim 4, Lumelsky teaches that the request analyzer process includes a request analyzer process for analyzing the request to identify the attributes of the request (Fig. 2; col. 7, lines 28 - 53).

2.5 Regarding claim 5, Lumelsky discloses that the request analyzer process includes means for identifying attributes of the request including one or more of requestor identification, user ISP identification, transmission throughput, client, and CDN server identification (Fig. 2; col. 7, lines 28 - 40).

2.6 Per claim 6, Lumelsky does not explicitly teach that the service level manager includes a process for directing the server process to employ a file open process for requesting the file system to access data associated with the selected content.

However, a file open process is inherent in Lumelsky in order for databases to be accessed.

2.7 Regarding claim 7, Lumelsky discloses a representation of the level of service to provide the request (Fig. 2; col. 7, lines 28 - 51).

2.8 Per claim 8, the rejection of claims 6 and 7 under 35 USC 102(e) (paragraphs 2.6 and 2.7 above) applies fully.

2.9 Regarding claims 9 – 11, Lumelsky discloses a service level manager that associated with a level of service to provide (Abstract; Figs. 2, 4; col. 7, lines 28 - 51); embeds into a pathname, service level information to be associated with the selected content (Abstract; Figs. 2, 4; col. 7, lines 28 - 51).

2.10 Per claims 12 and 13, Lumelsky teaches that the file system includes parsing a pathname associated with the selected content to identify a level of service to provide to the request content (Abstract; Figs. 2, 4; col. 7, lines 28 - 51); a process for associating the selected content with one of a plurality of different service levels (Abstract; Figs. 2, 4; col. 7, lines 28 - 51).

2.11 Regarding claims 15 – 18, Lumelsky discloses an admission process for employing the schedule to determine whether the request can be accommodated at the

level of service associated with the request (col. 7, lines 28 – 67; col. 2, lines 54 - 66); a deadline parameter representative of a time constraint for processing the request (Fig. 3b; col. 8, line 59 – col. 9, line 9; col. 16, lines 10 - 37); deadline parameter to generate the schedule for servicing the request (Fig. 3b; col. 8, line 59 – col. 9, line 9; col. 16, lines 10 - 37).

2.12 Per claim 19, Lumelsky teaches a slack-time process for arbitrating between scheduling requirements of content having different priorities of service levels (Fig. 3b; col. 8, line 59 – col. 9, line 9; col. 14, lines 53 – 57; col. 16, lines 10 - 16).

2.13 Regarding claim 20, Lumelsky discloses a control process for managing a system resource for controlling a rate at which service are provided (Abstract; Figs. 2, 5; col. 13, lines 52 – 55; col. 13, lines 62 – 67 **“Resources are thus allocated in terms of application requirements and optimized to local and global cost metrics as opposed to rigid resource utilization.”**; col. 14, lines 42 – 46 **“if bandwidth is predicted to be low, the network I/O monitor (not shown) will signal such condition to the resource management feedback module which determines whether additional bandwidth needs to be allocated.”**).

2.14 Per claim 21, Lumelsky teaches a system according to claim 20 wherein the control process manages a system resource selected from the group consisting of data

storage, system memory, processor resources, and network throughput (Fig. 5; col. 7, lines 28 – 32; col. 4, lines 30 – 39).

2.15 Regarding claims 25, the rejection of claims 1 and 20 (paragraphs 2.1 and 2.13 above) applies fully.

2.16 Per claim 26, the rejection of claim 21 (paragraph 2.14 above) applies fully.

Response to Arguments

Applicant's arguments filed 8/24/07 have been fully considered but they are not persuasive.

Applicant argues that the cited portion of Lumelsky utilized to reject claim 14 (now incorporated into claim 1) does not teach “a scheduling process for generating a schedule for servicing the request”.

Examiner has cited more relevant passages of Lumelsky (col. 14, lines 1 – 21 “the **service unit management module (SUMM) determines whether the provisioning request can be scheduled by the meta-resource** given the available resources.”; col. 13, lines 59 – 67).

Applicant argues, with regard to claims 20 and 25, Lumelsky does not disclose "a control process for managing a system resource for controlling a rate at which services are provided".

Examiner has cited more relevant passages of Lumelsky (Abstract; Figs. 2, 5; col. 13, lines 52 – 55; col. 13, lines 62 – 67 **"Resources are thus allocated in terms of application requirements and optimized to local and global cost metrics as opposed to rigid resource utilization."**; col. 14, lines 42 – 46 **"if bandwidth is predicted to be low, the network I/O monitor (not shown) will signal such condition to the resource management feedback module which determines whether additional bandwidth needs to be allocated."**).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth R. Coulter whose telephone number is 571 272-3879. The examiner can normally be reached on M - F, 7:30 am - 4 pm.

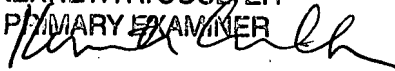
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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KENNETH R. COULTER
PRIMARY EXAMINER



krc